



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/497,522	02/04/2000	Hyun-doo Shin	Q53231	7586

7590

07/28/2004

Sughrue Mion Zinn MacPeak & Seas PLLC  
2100 Pennsylvania Avenue N W  
Washington, DC 20037-3202

EXAMINER

PARSONS, CHARLES E

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 07/28/2004

#17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/497,522

Applicant(s)

SHIN ET AL.

Examiner

Charles E Parsons

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 49, 51 and 53 is/are rejected.
- 7) ☒ Claim(s) 50, 52 and 53 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2613

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claim 49-55 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 49, <sup>51 53 + 55 are</sup>rejected under 35 U.S.C. 103(a) as being unpatentable over Ratakonda in view of Haghighi

49. (new): A method of processing video data comprising:

determining motion intensity levels indicating a motion intensity of respective inter frames included in an input video data by using motion compensation information of the respective inter frames; (See column 14 lines 36-41 of Ratakonda)

and determining a histogram indicating frequency of the respective motion intensity levels. (In column 17 lines 15-42 Ratakonda teaches 2 different schemes for histogram computation. Both of the schemes involve motion compensation of P and B frames. While he does not include details about how his histograms are indicative of frequency of occurrence, histograms are indicative of the frequency of whatever information they are purported to represent. See Haghighi column 3 lines 25-35 wherein he clearly teaches that the histogram peaks represent the frequency of occurrence. Therefore it would have been obvious to one of ordinary skill in the art to create a histogram indicative of the frequency of motion intensities motivated by the teaching of Ratakonda that each shot

Art Unit: 2613

should be treated differently as to the amount of motion they contain. Thus the histograms should be indicative of the amount of motion or intensity of the motion. See Ratakonda column 1 line 64 through column 2 line 5.)

51. (new): The method of claim 49, wherein the motion intensity levels are determined by using motion compensation values of respective predetermined sized blocks included in an inter frame. (See Ratakonda column 17 lines 5-16)

53. (new): The method of claim 49, further comprising: dividing a video stream into at least one video data; selecting the input video data among the at least one video data. (See Ratakonda abstract)

55. (new): The method of claim 53, wherein the dividing a video stream is performed by using a scene cut detection algorithm. (See Ratakonda Abstract as well as Column 4 lines 40-57 fade in and fade out are considered queues to scene changes)

***Allowable Subject Matter***

3. Claims 50, 52 and 54 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The claims are directed to a particular method of determining the motion intensity histograms that involves calculating ratios of a number of inter frames that have their respective motion intensities to the number of all of the inter frames as shown on page 6 of applicants specification. This feature was not found in a prior art search nor considered obvious by the Examiner.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Parsons whose telephone number is 703-305-3862. The examiner can normally be reached on M-TH 7AM to 5 PM.

Art Unit: 2613

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CEP

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2613